

Marks
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- Briefly explain why HF is a weaker Brønsted acid than HI and a stronger acid than H₂O.

F is more electronegative than O, so the H–F is more polarised bond than the O–H. This facilitates dissociation into F[−] and H⁺ ions.

I is much larger atom than F, so the H–I bond is much longer and weaker than H–F, so HF is weaker acid than HI.